



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/884,139	06/20/2001	Percy H. Rhodes	P06121US03/BAS	3382
881	7590	12/01/2003	EXAMINER	
LARSON & TAYLOR, PLC 1199 NORTH FAIRFAX STREET SUITE 900 ALEXANDRIA, VA 22314			NOGUEROLA, ALEXANDER STEPHAN	
		ART UNIT		PAPER NUMBER
		1753		

DATE MAILED: 12/01/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/884,139	RHODES ET AL.	
	Examiner	Art Unit	
	ALEX NOGUEROLA	1753	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on _____.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-14 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-14 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 20 June 2001 is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.
- 13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
 - a) The translation of the foreign language provisional application has been received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- | | |
|--|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ . |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ . | 6) <input type="checkbox"/> Other: _____ . |

Observation

1. The first line of step (c) in Claim 1 establishes a third buffer flow; however, the remaining lines of step (c) only further limit the second buffer flow, without mention of the third buffer flow. The examiner requests Applicant to confirm that step (c) is written as intended.
2. In claim 13, line 2 should "singular" be -- a single collection port --?

Specification

3. The abstract should be 150 words or less.

Claim Rejections - 35 USC § 112

4. Claims 1-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention:
 - a) Claim 1 recites the limitation "the chamber entrance" in lines 7-8. There is insufficient antecedent basis for this limitation in the claim;
 - b) Claim 1 recites the limitation "the chamber exit direction" in line 8. There is insufficient antecedent basis for this limitation in the claim;

Art Unit: 1753

- c) Claim 1 recites the limitation "the axial direction" in lines 9-10. There is insufficient antecedent basis for this limitation in the claim;
- d) Claim 1 recites the limitation "two said purge chambers" in line 13. There is insufficient antecedent basis for this limitation in the claim (-- at least -- is missing);
- e) Claim 1 recites the limitation "the purge valves" in line 14. There is insufficient antecedent basis for this limitation in the claim;
- f) Claim 1, line 15: are the "purge chambers" referred to in this line the at least two purge chambers in the axial direction?
- g) Claim 1 recites the limitation "the *sample* components [emphasis added]" in line 19. There is insufficient antecedent basis for this limitation in the claim;
- h) Claim 1 recites the limitation "the fractional components" in lines 26-27. There is insufficient antecedent basis for this limitation in the claim;
- i) Claim 2 recites the limitation "the separated sample" in line 1. There is insufficient antecedent basis for this limitation in the claim (although there is basis for extracted sample components);

- j) Claim 3 recites the limitation "the sample" in line 1. There is insufficient antecedent basis for this limitation in the claim;
- k) Claim 3 recites the limitation "the flow entrance" in line 2. There is insufficient antecedent basis for this limitation in the claim;
- l) Claim 4: are extraneous components also diverged with the second flow?
- m) Claim 8 recites the limitation "sample fraction" in line 1. There is insufficient antecedent basis for this limitation in the claim;
- n) Claim 8 recites the limitation "one sample fraction" in line 1. There is insufficient antecedent basis for this limitation in the claim;
- o) Claim 9 recites the limitation "the sample fractions" in line 1. There is insufficient antecedent basis for this limitation in the claim;
- p) Claim 11 recites the limitation "the sample fraction spectrum" in line 1. There is insufficient antecedent basis for this limitation in the claim;
- q) Claim 12 recites the limitation "the sample fraction spectrum being viewed" in line 1. There is insufficient antecedent basis for this limitation in the claim;

r) Claim 13 recites the limitation "the sample fraction spectrum being viewed" in line 1.

There is insufficient antecedent basis for this limitation in the claim;

s) Claim 14 recites the limitation "collection ports" in line 1. There is insufficient antecedent basis for this limitation in the claim; and

t) Claim 14 recites the limitation "sample entry ports" in line 2. There is insufficient antecedent basis for this limitation in the claim.

5. Note that dependent claims will have the deficiencies of base and intervening claims.

Allowable Subject Matter

6. Claim 1 would be allowable if rewritten or amended to overcome the rejections under 35 U.S.C. 112, second paragraph, set forth in this Office action.

7. The following is a statement of reasons for the indication of allowable subject matter:

Independent claim 1 requires the second buffer flow in the separation chamber to consist "of two flows on either side of the first flow that converge on the first flow at the chamber entrance and diverge from the first flow at the chamber exit" and that the second buffer flow be controlled "to converge and thin the first buffer flow with sample components at the separation

Art Unit: 1753

chamber entrance and then diverge and extract sample components at the separation chamber exit."

With respect to the second buffer flow, the claims indicated to be allowable in copending application 09/788,458 only require

establishing a second buffer flow in each of at least two said purge chambers in the axial direction, said second buffer flow having a second flow rate, said second buffer fluid flow having a second flow rate higher than that of the first flow rate [Claim 1, the only independent claim in the application; the remaining claims do not further limit the second buffer flow].

Similarly for claim 1 of US 6,478,942 B2, which is the only independent claim of the patent. This claim has the same limitation stated above for claim 1 of copending application 09/788,458 and none of the dependent claims further limit the second buffer flow.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALEX NOGUEROLA whose telephone number is (703) 305-5686. The examiner can normally be reached on M-F 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, NAM NGUYEN can be reached on (703) 308-3322. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9310.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Alex Noguerola
Alex Noguerola

11/29/03

Primary Examiner
TC 1753